Professional Behaviors and Attitudes: Factors Influencing Farmworkers Access to Mental Health Care

Samuel R Terrazas
Assistant Professor
College of Health Sciences
Department of Social Work
University of Texas at El Paso
500 W. University Drive
El Paso TX 79968

Abstract

The available research on the mental health of farmworkers suggests that they are more likely to suffer from mental illness in the form of depression and anxiety when compared to the general U.S. population. Farmworkers' mental health needs are not being met because of their marginalization; however, little is known about the role human service, health care and education professionals have on the mental health care of farmworkers. The aim of this exploratory cross-sectional study is to examine the associations between demographic characteristics, attitudes, beliefs, and mental health stigma to determine whether these variables influence professional behaviors namely their providing farmworkers with information or referrals to mental health care. Findings show that human service, health care and teachers who attach comparably higher levels of stigma to mental illness were more likely to provide farmworkers with information about and referrals to mental health care.

Keywords: Farmworker, stigma, mental health, human services

1. Introduction

Farmworkers in the U.S. have faced oppressive forces since the turn of the 1900's that is at the center of many of the challenges they face such as a living wage, poor health, pesticide exposure, substandard housing, poor education outcomes (Connor, Layne, Thomisee, 2010; Littlefield & Stout, 1987), and the repercussion of reignited anti-immigrant sentiments. Consequently, farmworkers are in need of services or interventions to ameliorate the problems associated to farm work; however, researchers have found that farmworkers face many barriers to access and use of human services, which result from both how these service organizations are structured, and farm work policy and labor practices (Littlefield, & Stout, 1987; Arcury & Quandt, 2007). The barriers created by human service organizational structures such as hours of operation, cultural competency, and federal and state regulations that limit services to undocumented people is potentially only one dimension explaining why farmworkers do not access available mental health care. Farm work is often carried out in rural areas and by farmworkers who face institutionalized oppression because of their minority and immigration status. This research study was designed to explore a poorly understood aspect of farmworkers mental health--human service, health care and teachers' role in facilitating access to mental health care to farmworkers.

Some portion of farmworkers, like the general population, suffers from mental illness; however, farmworkers appear to be more likely to suffer from depression and anxiety when compared to the general U.S. population (Alderete, Vega, Kolody, & Aguilar-Gaxiola, 2000; Hovey& Magana 2002a, 2002b, 2002c; Hovey & Magana 2003). Based on the prevailing beliefs that farmworkers have disproportionally higher rates of depression and anxiety than the general population, human service, health care and teachers who have contact with them in a professional context maybe encountering farmworkers with mental health needs (Georges, Alterman, Gabbard, Grzywacz, Shen, Nakamoto, Carrol & Muntaner, 2013). Professionals and paraprofessionals who work in agencies or program serving farmworkers may hold an important role to identify and initiate a pathway for the undiagnosed or untreated mentally ill farmworkers to access mental health care.

A literature review yielded no research studies that specifically explored how human service, health care or teachers who served farmworkers' professional behaviors were influenced by stigmatizing beliefs about the mentally ill. An exploratory research design was employed because of this void in the literature and to facilitate an examination of the associations between stigma associated to mental illness, demographic characteristics and the behaviors of professionals to expand our understanding about the access barriers farmworkers face to mental health care.

1.1 Literature Review

The extensive research on barriers to mental health care and discrimination the mentally ill face point to the stigma associated to mental illness as an explanation for these problems (Corrigan, 2004). The research literature is less dense related to professionals; however, it appears that professionals are not immune to stigmatizing the mentally ill including those in the medical and mental health fields (Schulze, 2007). In the case of mental illness, stigma is understood as the beliefs and attitudes that can result in avoidance and discrimination of the mentally ill (Corrigan, 2004) or an attribute that labels people with undesirable characteristics. Major and O'Brien's (2005) definition add that stigmatized people are also perceived as different and are consequently devalued. Stigma helps us to understand how stereotypical beliefs perpetuate discrimination towards people who are labeled with a mental illness (Corrigan & Wassel, 2008). Not unlike laypersons, human service professional may hold negative beliefs about the mental ill (Britt, Greene-Shortridge, Brink & Nguyen, 2008; Schulze, 2007) that can manifest into discrimination and create access barriers to those in need of mental health care.

The aim of this exploratory cross-sectional study is to examine the associations between demographic characteristics, attitudes, beliefs, and mental health stigma to determine whether these variables influence human service, health care and teachers' behaviors. The operationalization of the salient provider behavior focused on providing farmworkers with information about or referrals to mental health care providers. This study was designed to answer two research questions: Is there a relationship between the demographic variables of human service, health care and teachers who serve farmworkers and their families and the providers' professional behavior in giving information about and referring farmworkers or family members to mental health care services? Is there a relationship between human service, health care and teachers' scores on the Attribution Questionnaire (AQ-27) and their referral of farmworkers for mental health care?

A theoretical framework consisting of three constructs informed this study: stigma associated to mental illness, farmworker mental health, and human service provider attitudes. Researchers have found that farmworkers suffer comparably higher rated of depression and anxiety that the general U.S. population and do not access or receive treatment for these conditions because of complex and multiple barriers created by stigma, farm work labor practices and potentially the attitudes of human service providers about farmworkers and mental illness. Although a substantial amount of research has been conducted on stigma associated to mental illness among the general population, less attention has been given to the influence of stigma on human service providers and, to a lesser extent and only more recently, on mental health professionals (Manfred-Gilham, Sales, & Koeske, 2002; Schulze, 2007). Britt, Greene-Shortridge, Brink, and Nguyen (2008) found that some mental health care facility employees have negative attitudes and beliefs about the mentally ill. Professionals and para-professionals employed in mental health care facilities are perceived to have professional understanding and knowledge about mental illness that would minimize their stereotyping of the mentally ill. However, Volmer, Maesalu, and Bell (2008) found that even medical students, pharmacy students, and mental health professionals were not immune from negative and stigmatizing attitudes about the mentally ill.

The stigma attached to compromised mental health can become manifest in feelings of shame and doubt by the mentally ill, which can reduce the motivation to seek mental health care (Martin, Pescosolida, & Tuch, 2000; Schulze, 2007). Stigma is a significant obstacle to achieving a certain quality of life for the mentally ill in that it hinders access to and use of mental health care, including psychiatric treatment (Schulze, 2007). González, Vega, Williams, Tarraf, West, & Neighbors (2010) found that only one third of those diagnosed with major depression received mental health care, and Latinos were even less likely to receive treatment for depression. In 2011, 45.5 million adults in the United States were diagnosed with a mental illness, and of those, 38.2% received mental health care (SAMSA, 2012).

Present-day farmworkers tend to be males from Mexico, between the ages of 14 and 65+ years of age (NAWS, 2005).

Most farmworkers, 81%, reported that their native language was Spanish and 18% reported it to be English. Two percent reported their primary language to be other non-English or Spanish languages such as Creolo, Mixteco and Kanjobal ((NAWS, 2005). An individual farmworker earns on average between $10,000 and $12,500 per year, and the average family earns $15,000 to $18,000 per year (NAWS, 2005). More than half 53% of farmworkers are unauthorized to work in the U.S., 25% are U.S. citizens, 21 % are legal residents and 1% hold some legal authorization to work in the U.S. (NAWS, 2005). The marital and parental status of farmworkers is 45% are married parents, 37% single with no children, 6% unmarried with children and 12% are married with no children (NASW, 2005). Of those farmworkers with children 31% had one child, 33% had two children, 20% had three children and 16% had four or more children (NAWS, 2005).

The context in which farmworkers live and work tends to be rural farming communities. Some farmworkers migrate to and from various rural communities as they seek out work while others are residents of a particular community and work seasonally on farms. The rural context in which they tend to live has implications for their marginalization because it allows them to be hidden from the "view" of mainstream urban and suburban Americans. The perpetuation of unjust and oppressive employment policies and standards stems from such hiddenness. For instance, farmworkers face significant challenges from living in abject poverty, without a living wage, and as a result, they encounter barriers to services and resources, including health care. Farmworkers are subject to discrimination, unjust labor practices and policies; inadequate health care resources; and migration related stressors (Sakala, 1987; Sosnick, 1978; Tucker, 2000).

The mental health of farmworkers has received limited attention in the literature. The seminal research by Vega, Scutchfield, Karno, and Meinhardt (1985) found that in a sample of 500 farmworkers, more than 20 percent were at risk of needing mental health services, and 10 percent were at high risk of needing mental health services. Findings from this study suggest that farmworkers in this study did not receive or access mental health services at the same rate as the identified need. Hovey (2000) reports that among a non-probability sample of farmworkers, 38% suffered from clinical depression. Mental health and medical professionals revealed that the most prevalent problems of farmworkers were considered to be risk factors for chronic stress, such as poverty, overcrowded housing, medical needs, and substance and alcohol abuse, rather than specific, medically diagnosable psychiatric conditions (Vega et al., 1985).

The most common mental health conditions found among farmworkers by researchers have been anxiety and depression. Researchers speculate that the causes include stress, acculturative stress, poverty, poor health, and inadequate access to mental health care (Hovey & King, 1996; Hovey & Magana, 2002a, 2002b, 2002c; Magana & Hovey, 2003). Although these farmworkers may have a relatively greater need for mental health care, researchers suggest several reasons that explain why they are less likely to access and use such care. These reasons include their inability to pay, exclusion from the use of public supported health care services because of their immigration status, proximity to mental health care services, and stigma (Vega, Scutchfield, Karno, & Meinhardt, 1985; Hovey & Magana, 2002).

Although small in number, the mental health studies nevertheless suggest that farmworkers suffer a higher rate of some mental health conditions when compared to the known rates of mental health conditions in the general U.S. population. The farmworker mental health research findings are inconclusive, although several factors appear to contribute to these elevated levels of mental health problems (specifically anxiety and depression); the factors include stress, acculturative stress, poverty, poor general health, and job instability (Hovey & Magana, 2000, Hovey & Magana 2002a, 2002b, 2002c; and Magana & Hovey, 2003).

Human service professional attitudes about their clients are known to influence service/treatment outcomes. Arguably, human service professionals who stigmatize the mentally ill may be more inclined to provide substandard services and may consciously and/or unconsciously send messages to their clients that devalue and marginalize. Conversely, people who self-stigmatize or who internalize the discriminatory behaviors from society have been found to have poor treatment outcomes (Martin, Pescosolida, & Tuch, 2000). Corrigan (2004) found that trained mental health professionals are susceptible to the same stereotypical beliefs about the mentally ill as the general population. Professionals' attitudes about the mentally ill are influenced both by their work experience with the mentally ill, and by their attitudes about the mental health profession (Overton & Medina, 2008). Schulze (2007) found that interactions with mental health professionals accounted for 22.3% of the stigmatizing experiences of a sample that included people diagnosed with a mental condition and their families.

2. Methodology

2.1 Research Design

This exploratory, cross-sectional survey included a self-administered questionnaire, disseminated to employees in agencies or programs that serve farmworkers and/or their families and that are located in rural and urban South Florida. An exploratory cross-sectional research design was selected for this study because no prior studies have examined how professionals' attitudes influence the use and access of mental health care by farmworkers. The lack of prior research with farmworkers dictates the use of exploratory research methods of research topics with limited or no prior scientific examination (Rubin & Babbie, 2012).

2.2. Variables

Variables examined included mental health stigma, measured through the administration of the AQ-27, as well as the number of years of education, ethnicity, country of origin, age, years employed in human services, research participant's personal and familial farmworker employment history, and personal experience with the mentally ill. Instrumentation for this study included an author-developed questionnaire to collect demographic data and to capture professional behaviors, beliefs, and attitudes. The AQ-27 was included in the instrumentation package, which was administered along with the author developed questionnaire.

2.3 Instrumentation

The self-administered questionnaire included an instrument to measure human service, health care and teachers' perceptions of stigma: the Attribution Questionnaire (AQ-27). The Attribution Questionnaire (AQ-27) was developed by Corrigan, Markowitz, Watson & Kubiak (2003). Brown (2008), conducted an independent psychometric examination of the AQ-27 and found that it had acceptable internal consistency, test–retest reliability and convergent validity with other measures. The AQ-27 has received a significant amount of validation research from Corrigan, Watson, Garcia, Warpinski (2003). The AQ-27 was designed to be a self-administered measure consisting of 27 nine-point Likert scaled items**.** The AQ-27 includes a vignette depicting a mentally ill person and consist of nine sub-scales measuring blame, pity, anger, dangerousness, fear, help, coercion, segregation and avoidance.

2.4 Study Participants

A total of 188 questionnaires out of 238 were returned completed and used in the study, while 32 were left blank and 18 were returned partially completed and not included in the study. Research participants' identifying information (e.g., name, address, and place of employment) was not recorded to further ensure anonymity. Each completed questionnaire was coded with an alphanumeric designation prior to administration of the questionnaire, allowing for data entry into statistical software since no identifying information was gathered.

A purposive sampling methodology was used to collect data from research participants. These methods are justified in exploratory studies when the sampling frame is unknown (Rubin & Babbie, 2012). The study sample consisted of human service, health care and teachers' who deliver direct services to farmworkers and their families in rural and urban agencies or programs in South Florida communities. Identifying potential research participants was a challenge because not all agencies or programs specifically target farmworkers but may incidentally provide human services to farmworkers. For example, a county health department clinic in a rural farming community, as part of its standard service delivery to its constituents, would coincidentally also serve farmworkers. All agencies included in this study were found to provide services to farmworkers as a result of a purposive sampling designed.

Missing data was managed using available case analysis, which was determined to be an acceptable approach given that a nonprobability sampling method was used (Pigott, 2001). Missing data prediction methods are only useful with quantitative data; therefore, actual cases were reported. Missing data on variables in which multivariate analysis was conducted was managed using the SPSS version 22 Linear Trend at Point that replaces missing data with predicated values.

3. Results

3.1 Participant Characteristics

The sample size of this study was 188 human service, health care and teachers; 95.7% were female, and 64.9% reported being Latino. A total of 27.2 % of research participants reported being born in a Latin American country. The mean age of research participants was 39.1 years (SD=11.96), and 48.6% reported an educational level that went beyond high school. The mean number of years that research participants reported being employed in human services was 10.47 years (SD=8.99), and they also reported a mean of 7.97 years (SD=6.98) in their current position. A significant percentage of research participants (42.9%) reported being previously employed as a farmworker for an average of 6.9 years. More than half (65.7%) of the research participants reported that at least one family member was employed in farm work. In addition, 31.4% of the research participants reported knowing someone with a mental health condition and had known that person on average for 13.3 years (SD=11.8). A large portion of the sample (76.3%) reported working in an educational setting; 100 out of 168 research participants identified themselves as a "teacher." A large percentage of the sample (78.2%) out of 171 cases reported that the agency in which they were employed was an agency that exclusively served farmworkers.

Participants' responses to six specific questions created a measure of professional behaviors, and these measures assessed participants' views regarding the availability of mental health care for farmworkers and their tendency to tell farmworkers about and refer them to mental health care services. Of particular interest, for purposes of this study were responses to the question about making mental health care referrals. Notably, 68.8% of research participants who responded to this question reported that they had "never" referred a farmworker for mental health care in the past 60 days. Of equal interest is that 60.5% of the research participants reported that farmworkers had not requested mental health care in the past 60 days.

3.2 Relationship Testing

The association between the test variables: (1) associations between specific demographic variables and the tendency of participants to refer farmworkers for mental health services; and (2) associations between the research participants' tendency to refer farmworkers for mental health services and their scores on mental health stigma measures were examined. An analyses of the variable, "mental health care referrals for farmworkers in the last 60 days," and the variables, number of years of education, ethnicity, country born, age, years employed in human services, research participants' personal and familial farmworker employment history, and personal experience with the mentally ill to determine whether statistically significant relationships existed with the research participants' tendency to refer farmworkers to mental health care services. Three demographic variables demonstrated statistically significant associations with this tendency to refer farmworkers or their families for mental health services. A cross-tabulation using a Chi-square test found an association between the variable of having referred a farmworker to mental health services and having been previously employed as a farmworker (x^2 = 9.68, df= 4, p=.046). The research participants not previously employed as a farmworker (66.7%) had the highest percentage (55.9%) of those who reported having "never" referred a farmworker for mental health services in the past 60 days. Similarly, cross-tabulation using a Chi-square test found a statistically significant association between research participants who reported a family member's employed in farm work and their tendency to refer farmworkers to mental health care services in the past 60 days (x^2 = 11.01, df =4, p=.026) see table 1. A larger portion of the research participants (66%) who reported having a family member employed as a farmworker also reported never providing a farmworker with a referral to mental health care in the past 60 days. Research participants' years of employment in human service was associated with their tendency to refer farmworker to mental health care.

Table 1: Chi-square Analysis of Associations between Research Participants' Characteristics and Their Referring Farmworkers to Mental Health Care

Referral Mental Health Variable	X^2	df	p
Yrs. of Ed.	32.23	24	.121
Ethnicity	12.64	20	.892
Country Born	79.31	64	.094
Age	145.51	164	.847
Yrs. Employed	180.69	144	.021*
Employed FW	9.68	4	.046*
Family Empl. FW	11.01	4	.026*
Know Mentally Ill	7.4	4	.116

* p< .05

The second research question asked, "Is there a relationship between human service, health care and education teachers' scores on the Attribution Questionnaire (AQ-27) and human service professionals' tendency to make referrals to farmworkers for mental health care?" An analysis of variance (ANOVA) test was generated to compare the means on the AQ-27 with the responses to the variable, referral for mental health services, which was a 5 point Likert Scale. Higher scores on the AQ-27 indicate higher levels of negative beliefs or feelings about the mentally ill. Scores among the study sample on the AQ-27 ranged from 27 to 227, with an overall mean score of 132.84 (SD=27.60).

Table 2: ANOVA Analysis of Professional Behaviors and AQ-27

Source	df	SS	MS	F	p
Request MH					
Between Groups	4	3314.41	828.60	1.172	.325
Within Groups	159	112404.25	706.95		
Total	163	115718.65			
Referred to MH					
Between Groups	4	10592.63	2648.16	3.853	.005*
Within Groups	161	110664.17	687.355		
Total	165	121256.80			
Provide Info MH					
Between Groups	4	1160.252	290.06	.383	.820
Within Groups	159	120365.8	757.02		
Total	163	121526.05			
Believe Access MH					
Between Groups	4	7824.871	956.22	2.784	.028*
Within Groups	165	115923.74	702.57		
Total	169	123748.61			

* p< .05

A statistically significant association was found between the AQ-27 and the variable, referral for mental health services (F=3.85 df=4,161; p=.005) and believe farmworkers have access to mental health care (F= 2.78 df 4, 165; p = .028). The AQ-27 mean scores for participants who reportedly "always" referred for mental health services were higher (166.57, SD=31.27) than the scores for participants who "never," "rarely," "sometimes," or "often" referred see table 2. Similarly, the mean scores on the AQ-27 for research participants who reported "always" believing that farmworkers have access to mental health care was higher (149.4, SD= 35.05) than scores for participants responding to the other options. This analysis suggests that research participants who generated higher mean scores on the AQ-27 also had a tendency to provide farmworkers with referrals to mental health care services and believed that farmworkers have access to mental health care.

These findings suggest that the sample of human service, health care and teachers' who registered comparably higher levels of mental health stigma had a higher tendency to refer farmworkers to mental health care. They also believed farmworkers have more access to mental health care than research participants with lower AQ-27 scores or less stigmatizing beliefs about the mentally ill.

4. Discussion

Research participants who scored highest on the AQ-27 were more likely to provide farmworkers with a referral to mental health care. Additionally, research participants who had personal or family experience in farmworker were less likely to provide a farmworker with a referral to mental healthcare. Although the findings of this study cannot be generalized, they do support other researchers' findings of high rates of mental health conditions among farmworkers. Based on these findings attitudes and beliefs about mental illness and farm work do appear to influence human service, health care and teachers tendency to provide farmworkers referral to mental health care even though 30% of them reported that some portion of their clients needed mental health care.

This study's limitations include using a sample that includes an overrepresentation of self-identified teachers, available case analysis and nonprobability sampling method. Consequently, findings from this study cannot be generalized to the population and analysis among the various variables was based on different number of cases. Questions that assessed farmworker need for mental health service relied on participants' memory and their capacity to identify mental health conditions, which hold the potential for biases.

Explored in this study was the association between specific demographic variables and research participants' tendency to refer farmworkers to mental health care. Of the variables considered (i.e., number of years of education, ethnicity, country of origin, age, years employed in human services, research participant's personal and familial farmworker employment history, and personal experience with the mentally ill), the ones that had statistically significant associations to professional behaviors included having a family member employed in farm work, having personal employment history in farm work and years employed in human services.

Research participants who reported having a family member with prior farm work employment history were less likely to provide a farmworker with a mental health care referral. A possible explanation is that personal identification with farmworkers might create a protectionist stance for farmworkers, which might manifest in a reduction in the tendency to offer farmworkers information about or referrals to mental health care. Human service, health care and teachers' might be reluctant to facilitate the entry of farmworkers into another stigmatizing system, mental health, because of the many oppressive and discriminatory forces that farmworkers already routinely face. Equally possible is the research participants' perceived or real lack of professional capacity to make a mental health care referral.

Research participants were more likely to offer farmworkers information about mental health care services than to provide them with a referral to mental health care services. Human service, health care and education professionals' might not refer farmworkers who appear to need mental health care services to treatment because of the limited resources available to farmworkers. Farmworkers tend to reside in rural farming communities, which often have limited health and mental health care; consequently, proximity to mental health care may be a barrier both to referral and to access. The current restrictionist policy and laws regarding undocumented immigrants limit eligibility to receive public mental healthcare services. Research participants' role or job description in their respective agencies or programs might limit their ability to make referrals to farmworkers.

The analysis of study participants' beliefs about mental health stigma and their tendency to refer farmworkers to mental health care suggests that human service, health care and education professionals who had the highest mean scores on the AQ-27 (mental health stigma measure) were more likely to refer a farmworker to mental health care. Mental health stigma comprises negative beliefs, feelings, and stereotypes, including fear, anger, and a perception that the mentally ill are dangerous. Research participants who reported that they referred farmworkers to mental health services believe that people with mental health conditions are dangerous based on the AQ-27 subscale. Although this belief is a feature of mental health stigma, it also underscores why research participants would refer a farmworker to mental health care: because they believe that the mentally ill are dangerous and thus pose a threat.

Structural stigma is a factor in how the mentally ill access and use mental health care; however, in this study, research participants who exhibited the highest levels of mental health stigma tended to refer farmworkers to mental health care more often than those who held less intense stigmatizing attitudes about persons with mental illness. One possibility is that, among this sample of farmworker human service, health care and education professionals, structural stigma manifests differently and that access barriers to mental health care are not the result of structural stigma. Human service, health care and education professionals' tendency to promote mental health care among farmworkers might result from other phenomena, such as fear of the mentally ill, or over-identification with farmworkers, which results in a protectionist stance.

Research participants' professional behaviors suggest contradictory perceptions about the mental health needs of farmworkers, the availability of mental health care services, and their tendency to provide information about or referrals to farmworkers for mental health care. Given that the largest portion of the self-reported job classification of the sample was "teacher," their professional behaviors might reflect a perception of their professional role that does not include mental health-related services. Although a disproportionate number of research participants reported a job description of "teacher," 86% of the research participants reported being employed in an agency that serves farmworkers exclusively, which suggests that some meaningful amount of the services provided to farmworkers occurs in educational settings.

An extension of this study using a larger sample and probability sampling methods would enhance our understanding of the mental health care needs and pathways for farmworkers. Further research would advance the understanding of human service, health care and education professionals' beliefs about mental health conditions and how their personal and family experience in farm work employment affects their perception about stigma related to the mentally ill. We need to examine human service, health care and education professionals who identify farmworkers' mental health needs and assess why they do not provide farmworkers with information about and referrals to mental health care. These findings could lead researchers to an improved mental health delivery system for farmworkers.

References

Arcury, T.A., Quandt, S.A. (2007). Delivery of Health Services to Migrant and Seasonal Farmworkers. *Annual Review of Public Health*, 28, 345-363.

Alderete, E., Vega, W., Kolody, B., & Aguilar-Gaxiola, S. (2000). Lifetime Prevalence of and Risk Factors for Psychiatric Disorders Among Mexican Migrant Farmworkers in California. *American Journal Of Public Health*, 90(4), 608-614.

Britt, T.W., Greene-Shortridge, T.M., Brink, S., Nguyen, Q.B. (2008). Perceived stigma and barriers to care for psychological treatment: Implications for reactions to stressors in different contexts. *Journal of Social and Clinical Psychology*,27(4), 317–336.

Conner, A., Layne, L., Thomisee, K. (2010). Providing care for migrant farm worker families in their unique, sociocultural context and environment. *Journal of Transcultural Nursing*, 21 (2), 159-166.

Corrigan, P.W. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614–625.

Corrigan, P.W., Markowitz, F.E., Watson, A., Rowan, D., Kubiak, M. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health & Social Behavior*, 44(2), 161–179.

Corrigan, P.W., &Wassel, A. (2008). Understanding and influencing the stigma of mental illness. *Journal of Psychosocial Nursing and Mental Health Services*, 46(1), 42–49.

Georges, A., Alterman, T., Gabbard, S., Grzywacz, J.G., Shen, R., Nakamoto, J., Carroll, D.J., &Muntaner, C. (2013). Depression, social factors, and farmworker health care utilization. *The Journal of Rural Health*, 29 (1), 7-16.

González, H.M., Vega, W.A., Williams, D.R., Tarraf, W., West, B.T., & Neighbors, H.W. (2010). Depression care in the United States: Too little for too few. *Arch Gen Psychiatry*, 67(1):37 46.doi:10.1001/archgenpsychiatry.2009.168.

Hovey, J.D. (2000). Psychosocial predictors of acculturative stress in Mexican immigrants. *The Journal of Psychology*,134(5), 490–502.

Hovey, J.D., & King, C.A. (1996). Acculturative stress, depression, and suicidal ideation among immigrant and second-generation Latino adolescents. *American Academy of Child and Adolescent Psychiatry*,35(9), 1183–1192.

Hovey, J.D., & Magana, C.G. (2002). Cognitive, affective, and physiological expressions of anxiety symptomatology among Mexican migrant farmworkers: Predicators and generational differences. *Community Mental Health Journal*,38(3), 223–237.

Hovey, J.D., & Magana, C.G. (2002). Exploring the mental health of Mexican migrant farm workers in the Midwest: Psychosocial predicators of psychological distress and suggestions for prevention and treatment. *Journal of Psychological*,136(5),493–214.

Hovey, J.D., & Magana, C.G. (2002). Psychosocial predicators of anxiety among immigrant Mexican migrant farmworker: Implications for prevention and treatment. *Cultural Diversity and Ethnic Minority Psychology*,8(3), 274–289.

Littlefield, C., & Stout, L.C. (1987). A survey of Colorado's migrant farmworkers: Access to health care. *International Migration Review*, 21(3), 688–707.

Major, B., & O'Brien, L. T. (2005).The social psychology of stigma. *Annual Review Of Psychology*, 56(1), 393-421

Manfred-Gilham, J., Sales, E., & Koeske, G. (2002). Therapist and case manager perceptions of client barriers to treatment participation and use of engagement strategies. *Community Mental Health Journal*, 38(2), 213–221.

Martin, J.K, Pescosolida, B.A., & Tuch, S.A. (2000). Of fear and loathing: The role of "disturbing behavior," labels, and casual attributions in shaping public attitudes towards people with mental illness. *Journal of Health and Social Behavior*, 42(2), 208–223.

Overton, S.L., & Medina, S.L. (2008). The stigma of mental illness. *Journal of Counseling Development*, (86), 143–151.

Pigott, T.S. (2001). A review of methods for missing data. *Educational Research and Evaluation*, 7(4), 353-383.

Rubin, A. & Babbie, E. (2012). Research Methods for Social Work (8th ed.). Pacific Grove, CA: Brooks/Cole.

Sakala, C. (1987). Migrant and seasonal farmworkers in the United States: A review of health hazards, status, and policy. *International Migration Review*, 21(3), 659–683.

Schulze, B. (2007). Stigma and mental health professionals: A review of the evidence on an intricate relationship. *International Review of Psychiatry*, 19(2), 137–155.

Substance Abuse and Mental Health Services Administration, Results from the 2011 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-45, HHS Publication No. (SMA) 12-4725. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2012. Retrieved July 12, 2013,fromhttp://www.samhsa.gov/data/NSDUH/2k11MH_FindingsandDetTables/2K11MHFR/NSDUHmhfr2011.pdf

Tucker, L. (2000). Fingers to the bone: United States failure to protect child farmworkers. New York: Human Rights Watch.

U.S. Department of Labor, Office of the Assistant Secretary for Policy, Office of Programmatic Policy, Research Report No. 9. March 2005. Findings from the National Agricultural Workers Survey (NAWS) 2001 - 2002.A Demographic and Employment Profile of United States Farm Workers.

Vega, W.A., Scutchfield, F.D., Karno, M., & Meinhardt, K. (1985). The mental health needs of Mexican-American agricultural workers. *American Journal of Preventative Medicine*,1(3), 47–55.

Volmer, D., Maesalu, M., &Bell, J.S. (2008). Pharmacy students' attitudes toward and professional interactions with people with mental disorders. *International Journal of Social Psychiatry*, 54(5), 402–413.